

Kalanamak Rice [UPSC Notes]

Addressing the problem of lodging, the Indian Agriculture Research Institute (IARI) has successfully developed two new dwarf varieties of Kalanamak Rice that give double the yield, namely Pusa Narendra Kalanamak 1638 & Pusa Narendra Kalanamak 1652 in Uttar Pradesh. For the old variety the length of the plant is 140 cm and for the new variety it is between 95-100 cm.

Kalanamak Rice has been in the news lately and hence this is an important topic for the [UPSC current affairs](#) segment.

Kalanamak Rice

Kalanamak rice is a traditional variety of paddy with a black husk and powerful aroma.

- It is regarded as a gift from Lord Buddha to the people of Sravasti (capital of ancient Kosala) when he visited the region after enlightenment.
- It is grown in 11 regions of the terai region in the north-east of Uttar Pradesh and in Nepal. It is grown in Bazahaw, Dubaripur, Dewra, Mohanjot, Siyao, Niyai, Ramwapur, Bazardeeh, Doharia-Bujurg, Naugarh and Aligarahawa villages of Siddharth Nagar District.
- The traditional kalanamak rice is protected under the [Geographical Indication \(GI\) tag](#) system (2013).
- The Food and Agriculture Organisation (FAO) of the United Nations featured it in its book called “Speciality Rice of the World”.
- In 2018, it was awarded the [“One District, One Product”](#) label of Siddharth Nagar district, an aspirational district in Uttar Pradesh’s Terai belt.

There are more than 6000 varieties of rice in India. Among them, the aromatic rice Kalanamak, famously known as Buddha Rice is a hidden treasure. This variety is not only famous for its taste and aroma but it also has a cultural significance.

Benefits of Kalanamak Rice

Some of the benefits of Kalanamak Rice are given below:

- Rich in micronutrients like zinc and iron.
- Rich in antioxidants like anthocyanin which helps in preventing heart diseases.
- Regular intake can prevent Alzheimer’s disease.
- Its regular consumption prevents diseases like anemia, alopecia, seborrheic, etc.
- Regulates blood pressure and blood related problems.

- Its low glycemic index (GI) approx. 49 - 52 % makes it suitable for diabetics.
- It also has 11% protein, almost twice as much as other varieties.

Issues with the Traditional Kalanamak Rice

- The issue with the conventional kalanamak rice is that it is tall and prone to lodging resulting in low yield.
 - Lodging is a condition in which the plant falls to the ground due to the formation of grain which makes the top heavy and its stem weak.
- The blight bacterial disease outbreak also impacts the paddy.
 - Scientists have addressed this issue by inducing blight resistant genes.

Crossbreeding of Kalanamak Rice

- The dwarfing genes from the rice variety Bindli Mutant 68 and the gene of Pusa Basmati 1176 were used as parents to cross with Kalanamak and the progenies were further back crossed with kalanamak to restore its quality.
- The aim of cross breeding was to bring dwarfness in the variety and make the plant strong to prevent lodging.
- The productivity of the new varieties have gone up to 4.5 - 5 tonnes per hectare as against 2.5 tonnes in the case of traditional Kalanamak rice.

Frequently asked questions about Kalanamak Rice

Q. Where is Kalanamak rice cultivated?

Ans: Kala Namak rice is grown in the tarai area of Siddharth Nagar and ten neighbouring districts of eastern Uttar Pradesh.

Q. What is Buddha rice?

Ans: It is another name given to the Kalanamak Rice.